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The Evolving ‘Thunder’: The Challenges Around Imposing the Digital Tax in Developing African Countries

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Abstract

This paper addresses the challenges of taxing the digital economy. It promotes digital taxation to reign in the digital economy as part of a state's taxable base and economic structure. It supports the redefinition of the tax rules governing traditional businesses to include the taxable features of the digital economy. The paper advocates for unilateral tax measures to enable developing African states capture the digitally enabled movement of money. The paper's methodology is built around the doctrinal method alongside the process of deductive reasoning. Specific countries and their approach to taxing the digital economy is highlighted with the intention of comparing their fiscal regimes approach to unilateral tax measures targeting the digital economy. The literature addressed in the paper focuses on recent international and government responses in highlighting the problem with digital taxation and identifying the key areas requiring policy recommendations, which the paper then offers to provide. Although several academic works and the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) discussion papers have addressed the challenges of taxing the digital economy, there has been little focus on describing the sort of policy recommendations that could effectively guide developing African countries to rely on in enacting their own laws to target the taxation of cross-border digital corporations. This paper offers some of these policy recommendations.

Keywords: African countries, data, digital tax, user participation, value creation.

1. INTRODUCTION

While there is no shortage of specialized studies on taxes and cognate forms of redistribution, the potential evolution of tax represented through digitization presents exciting opportunities for policy making and new scholarship. Most work in tax history has stemmed from a tradition in historical sociology that attempts to relate social and economic structures to tax policy [18]. As such, digital structures that enable the creation and movement of money have been excluded from informing tax policy until recently [1], [2], [7], [10], [21], [27], [39], [40]. Digitalisation has changed the way we understand tax [23]-[25]. New streams of revenue generation resulting from online or digital economic activities remains untapped and unapplied towards steering economic growth. Even though these new digital models have been met with novel regulatory and tax approaches globally, they are proving problematic in terms of identifying the activity upon which taxation should be based [43]- [45], [55]. This is because traditional tax rules do not contemplate digital aspects as sources of taxable income. The role of tax policy in the digitalisation of the economy therefore, merits consideration, specifically around domestic resource mobilisation as a factor for economic growth, especially in Africa.

There is a growing global consensus that the digital economy is relatively undertaxed when compared with the taxation of traditional businesses [10], [11], [14], [19]. Certain inherent characteristics such as reliance on cross border provision of services without physical presence, easy transfers of intangible assets, and novel ways to create value make it particularly easy for enterprises to limit their tax liabilities and sometimes utilise this forum to evade taxation. To provide a solution to this problem, domestic states, regional blocs, and international bodies have recommended to reform the corporate tax framework and the value added tax (VAT) system to align it with income generating transactions within the digital economy [4], [5], [6], [20], [21], [24], [33], [36], [37]. VAT has been updated in European Member States to consider the changes resulting from digitalization. There has also been a move toward a destination-based system informing tax policies to capture the digitally sourced revenue—for example, in digital advertising, the country from whence the income is derived is the proper state to tax such income.

African states, however, are unable to benefit from this system since the bilateral treaties signed with countries whose companies have a digital presence in African markets (for example Jumia, Airbnb and Uber), do not recognize digital presence as a permanent establishment to trigger taxation [4], [29]. Online platforms providing services to users in the form of contacting independent taxi service providers and decentralized financial transactions or money transfers, without physical presence have created a mismatch between tax rules and digitalisation. This has resulted in domestic states losing revenue. It has resulted in political differences on the question of which state is to tax income earned through the digital economy. Kenya, a post-colonial developing country whose tax laws were shaped by its former coloniser has recently departed from the concept of permanent establishment as a rule to impose tax and introduced the concept of digital establishment. The latter reform permits the state to unilaterally impose the digital services tax from January 2021 [15].

Discussions at the OECD level, however, constrain national policy space in the governance of the digital tax [26], [27], [46], [66]. Such constraints are represented through the web of bilateral, multilateral and plurilateral trade, investment and economic integration agreements between the OECD and the developing world. These agreements regulate intellectual property rights, the establishment and operation of services such as finance, and the use of administrative process. Inherent in each of these agreements is the right to tax. Consequently, the relationship between taxation and digital economy becomes a preeminent issue to be addressed.

The aim of this paper therefore is to first address the challenges of taxing the digital economy and to offer potential solutions towards aligning the digital economy with the tax rules governing traditional businesses. The paper is structured as follows. Section 2 analyses digital taxation to draw out its salient features that have made

it difficult for developing countries to subject it to their tax legislation. It also describes the types of digital taxes specific countries apply. Section 3 addresses the importance of taxing the digital economy and links its taxation to meeting progress under the 2030 Agenda for Sustainable Development and the pan African development vision set out under the Africa Union Agenda 2063. Section 4 examines the current debates around digital taxation and in section 5 the paper offers its own policy recommendations for developing countries, specifically inclined towards Africa.

2. QUESTIONS AROUND IMPOSING THE 'AFRODIGITAL' TAX

In this section, the paper examines the digital tax to draw out its salient features that have made it difficult for African countries to subject it to their tax legislation. The section also describes the types of digital taxes specific countries apply showing the different approaches to unilateral measures taken by states in imposing the digital tax.

2.1. Construing the digital tax

The digitalisation of the economy introduced new digital business models which did not require a physical presence to carry out digital transactions. The erosion of physical barriers between producers and consumers in different countries, resulting out of the Internet through which digital business models advertised their goods and services to consumers globally, prevented governments from directly taxing these digital corporations [56], [59]. To reduce the tax gap arising out of legislation that permitted the taxation of 'brick and mortar' companies and was silent around digital companies, governments started to actively discuss ideas around direct taxation of digital corporations. Such thinking around imposing the digital tax started gaining traction around 2013 with the OECD/G20's Inclusive Framework on Base Erosion and Profit Shifting (BEPS) project [42].

One of BEPS actions deals specifically with the digital economy and one of its outcomes has been the March 2018 interim report on '*Tax challenges arising from digitalisation*' [42]. The document shows that there is no consensus among countries on how to adapt the international tax framework permanently to the digital era, but that the intention is to arrive at a new global consensus by 2020 [42]. The report also discusses the topic of interim digital tax measures, which has polarised countries depending on the expected benefits or losses to their tax jurisdictions.

Those in favour of the digital tax consider that there is a sound imperative to enact digital taxation laws so that the tax paid by digital businesses corresponds to value generated in their jurisdictions. These countries consider that the current situation wherein digital corporations are earning revenues across borders without remitting taxes on their profits challenges the fairness, equitability, and accountability of the digital world. Considering the length of time it will take to achieve a global consensus on taxing the digital economy, they believe that more immediate action is needed [42], and therefore, favour imposing unilateral tax measures. Kenya is a good example. The Kenyan government will impose the digital services tax on all online transactions, unless they are legally exempted, from January 2021 [15].

By contrast, other countries, such as the United States of America, that oppose the digital tax consider that there are several risks and adverse consequences that will ensue such as negative impacts on investment, innovation, growth and welfare, passing of the tax to consumers and businesses, possibility of over-taxation, implementation difficulties and administration costs [58]. With arguments such as this, it seems that countries such as the US want to distinguish their interests with that of the others by creating a digital economic order in which they are dominant interveners in tax policy making, while other countries are to be seen as subordinates, merely participating within the digital tax structure influenced by them.

Looking at Africa for a framework based on which a continental approach to taxing the digital economy can be based on, there appears to be none at the Africa Union (AU) level. There are no AU rules addressing the digital aspects of corporate taxation and there are no rules on revenue-based tax on profits from digital activities such as running an online taxi service; for example, the online all women taxi provider; An Nisa in Kenya [61]. Instead, the digital taxes imposed in specific African states, such as Uganda, Tanzania, Benin, Mozambique and Zambia burden the common taxpayer with levies on using social media and paying for license fees for online content creation. This form of 'Afrodigital' tax is passed on to the consumer.

The 'Afrodigital' tax is an example of a regressive construction of the tax potential of the digital economy by the African states. They do not target for tax purposes application development, hosting portals, online advertising and audio-visual content creation, which are the key drivers of the digital economy and income generators. While these African countries have limited their focus on targeting the consumers of the digital economy, the European, Pacific, Middle Eastern and Asian countries are focused on taxing value. Table 1 below shows the contrasts between selected African, Asian, Middle East, European, and Pacific countries in their approach to construing and imposing digital taxation.

Table 1: Different approaches to digital taxation

Africa

Country	Type of digital activity taxed	Tax Details
Uganda	Social media	0.5% transaction tax to access social media (social media tax) [12].
Tanzania	Online content creation	Registration and license fees for online content creators [62]
Benin	Communication	5% fee on texting and calls (for using over the top services) 218 Decree 341-25 of July 2018
Mozambique	Online media	Media fees for local and foreign journalists. Decree 40/2016, 23 July 2018
Zambia	Communication	Daily tariff rate on internet calls [47].

Asia/Middle East

Country	Type of digital activity taxed	Tax details
Saudi Arabia and Kuwait	Online trading	Introduced the concept of virtual permanent establishment (PE) – any services performed for a period longer than the tax treaty threshold (183 days) under cross border agreements between a non-resident and consumers in Saudi Arabia/Kuwait will create a virtual PE [13].
India	Online advertising	Equalisation levy on online advertising revenue earned by non-resident e-commerce companies introduced in 2016. Tax base is the value of transactions, not the profits [17].
Taiwan	Digital services	All foreign businesses that supply digital services to Taiwan residents to pay VAT effective 2017 [49]
Turkey	E-Business	Withholding tax (WHT) on payments made through e-business and other online activities effective 2016. Introduced the concept of an electronic PE [31].
China	E-Commerce	Import of retail goods through e-commerce subject to customs duty, VAT and consumption tax.

European/Pacific

Country	Type of digital activity taxed	Tax details
<i>France</i>	Online content distribution	2% tax on distribution of audio-visual content introduced in 2016 (referred to as the YouTube tax) [9].
<i>Italy</i>	Digital transactions	3% levy on digital transactions based on value of taxable transactions effective 1.1.2019. Less than 3000 taxable transactions exempted [30].
<i>Hungary</i>	Online advertisement	5.3% advertisement tax for entities exceeding HUF100million introduced in 2014 [50].
<i>Australia</i>	Online advertisement	3% levy on advertising revenue from 'globally significant enterprises' with annual turnovers of more than AUD1 billion [48].
<i>New Zealand</i>	Online services	Extended the scope of its goods and services tax (GST) to digital 'remote' services provided offshore (Inland Revenue, 2016).

Compiled by Author

It seems that all the countries identified in table 1 have set out to maximise their revenue potential. While African states are conceptualizing the imposition of the digital tax around consumers, non-African states are targeting the digital corporations. It seems that African states continue to reproduce the elements of colonialism into their tax philosophy. The colonialist perspective on tax was to extract revenue from the colonised to finance state building, instead of the private sector – the beneficiaries of various tax exemptions and incentives [35].

2.2. Salient features of digital businesses that are a barrier to tax

There are specific salient features of digital businesses that are particularly pertinent to taxation challenges. These features have been highlighted by the OECD [39], [40], the European Commission [11] and the African Tax Administrators Forum (ATAF) [4]. Digital enterprises rely heavily on data and intangible assets, particularly intellectual property, that are often hard to value [24], [43], [44]. Furthermore, user participation, user generated content, network effects (for example, when users are the building blocks of networks) and data collection and mining are common for highly digitalised businesses. While they are precious assets in a digital economy and help to generate profits, it is difficult to value and tax these aspects [36], [43], [44].

The possibility of digital businesses to have their remote workers, IT infrastructure and customers spread across multiple jurisdictions makes it difficult for the government of market jurisdictions to establish taxing rights in the absence of physical presence of the digital businesses. Solutions to addressing these political and technical challenges is within the purview of the OECD BEPS project on Pillar 1 [39]. The Report points to the difficulty of directly taxing digital corporations when framed around the complexity in characterizing income derived from the digital business models. Taxing intangibles has also been pointed out as problematic. The OECD BEPS project produced 15 action reports in 2015 for rebooting the international tax system, many of which cover the taxation of intangible assets. This is seen in the discussion and proposals in respect of hybrid mismatches in Action 2, where a key focus has been on stateless income associated with intangible assets. The Action 5 papers demonstrate a desire to ensure that jurisdictions seek to attract intellectual property (IP) rich companies in ways that are properly reflective of the business activities. The report on Actions 8–10 focuses on the alignment of people, substance and profit for the most mobile asset classes, such as intangible assets. Implicit in all this is that valuing intangible assets will be very difficult, they can be moved around the globe instantaneously in the digital world and this provides opportunities for aggressive tax planning.

Despite recognition of these challenges at the international level, the outcome of the work of bodies such as the OECD, the Independent Commission for the Reform of International Corporate Taxation (ICRICT) [26], the

United Nations Committee of Experts on International Cooperation in Tax Matters [6] and ATAF [4] is yet to agree on a common understanding of the concept of 'value creation' and 'data' in relation to the digital economy and intangible asset identification over the digitized platforms. Agreements around these core issues is central to establishing taxing rights. Currently, there is a challenging disconnect between where value is created, and where and why taxes should be paid. This significantly affects revenue generation in Africa. Hence, the need to explore these challenges becomes imperative and will be examined in the next sections.

3. SOURCING TAX FROM THE DIGITAL ECONOMY FOR DEVELOPMENT AND ITS CHALLENGES

This section addresses the importance of taxing the digital economy in Africa and links its taxation to meeting progress under the 2030 Agenda for Sustainable Development and the pan African development vision set out under the Africa Union Agenda 2063.

3.1. Digital tax for development

The 2030 Agenda for Sustainable Development adopted by the UN General Assembly in September 2015 set out 17 broad goals to be addressed through meeting no less than 169 individual targets by 2030. This global action agenda provides a coherent integration of diverse development issues, notably no poverty, zero hunger, good health and wellbeing, quality education, gender equality, industry, innovation and infrastructure. It elevates sustainability to the forefront of the global agenda, a recognition that a lack of progress on one goal can threaten to undermine progress in all other areas of human development [63], [64].

The Sustainable Development Goals (SDGs) mirror the Pan African vision set out in the Africa Union Agenda 2063: *The Africa We Want*. They also map neatly onto the 7 aspirations identified in the Agenda. Such interrelationship between the SDGs and Agenda 2063 is based on their response to develop new solutions to humanity's critical problems, to improve how the world is governed now and, in the future, and to enhance the quality of people's lives. The two agendas, one for the world (the SDGs) and the other for Africa (Agenda 2063) set out the common vision for the continent's economic, digital, social, legal and political development. Their implementation will require a comprehensive approach to mobilising sufficient finances, which currently present the most fundamental challenge.

While the financing gap to achieve the SDGs in developing countries is estimated to be around US\$2.5 - 3 trillion per year [64], the Agenda 2063 Financing and Resource Mobilisation Strategy (RMS) does not provide such approximate estimates [63], [64]. The RMS instead suggests that 75-90% of domestic resource mobilisation (DRM) will be channelled to finance Agenda 2063. In meeting this financing gap, the United Nations (UN) recommends boosting domestic revenue mobilisation efforts from the digitized economy to increase financing for SDGs [68]. Both the Agendas underline the need to strengthen global partnership for sustainable development by looking to the digital world alongside combatting corruption and curbing illicit financial flows (IFF) as measures to increase DRM.

There is no shortage of financing that can be made available given the size, scale and level of sophistication of the digital world. The available finance, however, is not being channelled toward sustainable development at the scale and speed required to achieve the SDGs and support Agenda 2063. In 2019, the gross world product was estimated at over US\$86.60 trillion [65] and total global wealth reached US\$360.6 trillion, out of which US\$4.1 trillion represented Africa's minimal share. The financial sector is in a far more privileged position to influence the agendas, not only through the reorganisation of the global financial practices to generate funds for sustainable development, but also through strategically leveraging revenue from the digital economy.

Digitalisation has unlocked new sources of finance, both ‘bottom up’ and by better matching investors with sustainable investment opportunities. Particularly related to greater financial inclusion and innovation is the opportunity the digital economy presents for Africa to align the digitalisation of finance with SDGs and Agenda 2063.

3.2. The digital tax: its imposition and identification challenges

There are sharp differences between the older and newer styles of tax policy following digitisation with the latter developing around an interactive framework at the OECD and United Nations level. The digital tax happens to be dominated by western neo-liberal ideals. Thus, the merits and demerits of imposing the digital tax is conceptualized around economic organisation of trade on one hand, and on the other, its digital market economy. The former revolves around corporation tax, VAT/sales tax from e-commerce sales, trade tariffs and taxation of the users of platforms for economic activity (shown in figure 1). The latter is focused on value creation, data and user participation. Taxing the latter will depend on whether developing countries are able to capture the digital values that the various companies are creating. This proves quite challenging. Some of these challenges are discussed in the following sub-sections.

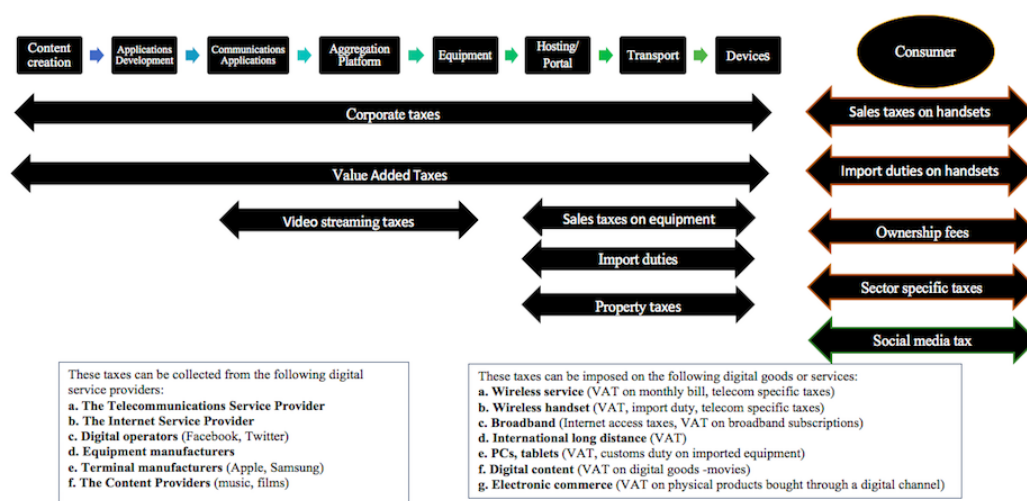


Figure 1: Diversity of taxes that can be collected from the components that make up the digital economy sector¹

3.2.1. How to determine value creation

The digital economy has provided traditional businesses with a new means with which to serve customers and advertise their products and services by ‘clicking the mouse’. The digital space captured by these businesses provide them with an online distribution system without the need to have a physical storefront. Value creation generates income, and this income should be taxed where such value is created. The place of value creation along the digital economy is very difficult to discern. Olbert and Spengel also confirmed this difficulty by asserting that a systematic paradigm of value creation within which to analyse digital business models must first be conceptualized before decisions on taxing the digital economy based on value creation are made [43].

Value creation can only be determined by the capture of digital data. Yet, there is no law that sets out provisions on how to capture digital data [44]. If this data is not captured, then the question of value creation cannot be addressed. This in turn implies that a digital business activity then cannot be identified resulting in tax

¹ Source: Author

losses. However, the mere collection of data should not trigger any profit taxation unless as Olbert and Spengel argue, '*polymakers are willing to fundamentally review the justification of taxing rights*' [43, p2]. Regulating the digital economy in capturing value creation is therefore key in identifying the tax nexus for online businesses. The 2018 OECD Interim Report on *Tax Challenges Arising from Digitalization* recognised differences in the roles of data and user participation in value creation and assumes consensus that taxation in a digitalized environment should be based on value creation by the enterprise [40].

Thus, the only debate would appear to be whether the user data that can be monetized or the user participation that adds value – such as by participation in a network, e.g., bringing in friends – is in fact value creation by the enterprise. There is probably far less agreement that the fundamental issue is what value the enterprise creates than might appear from the Interim Report, and far less agreement on what that means in any case. This means that within the digital economy users do not have the sole role of user/consumer anymore but switch between producer of content and user of content created by others and the company. In taxing the digital business therefore, it is necessary to distinguish between the different ways that users can contribute and their degree of participation to correctly consider the value they have created before tax considerations are identified.

3.2.2. Aligning profit with value generation

While governments continue to support the principle of aligning profit with value creation, there is a clear need to consider the situations in which that principle is not being delivered by the existing international tax framework [23], [24]. It is important to consider how the international tax framework is being stressed by digitalisation and whether it is flexible enough to take account of the differences in how certain digital business models operate and generate value. For example, it is necessary to consider how the increased integration of multinational groups, and the ability for groups to manage their global operations from a central location, could create challenges in the administration of transfer pricing rules (e.g., in determining where control is exercised) and how those challenges could be best dealt with. And as part of that, consideration should be given to how those challenges might be exacerbated in digital business models that are highly digitalised in terms of their inputs, processes, and outputs.

3.2.3. Digital business models

In taxing digital business models, addressing the following question will be key: *Is the international tax framework flexible enough to accommodate different business models within the digital economy and ensure fair outcomes that align profits with value creation?* Haslehner et al argue that the mere consumption of a good or service in a country should not, by itself, entitle that country to tax the profits of the business providing those goods or services [21]. However, for many digital businesses that operate in markets through an online platform, the users of the platform (which may or may not be identical to a business's consumers) play a more integral role in the pursuit of revenue and create material value for a business through their sustained engagement and active participation [45]. Take, for example, a social media platform that generates revenue through directing adverts at Kenyan users who use a free online platform. The success of that business is reliant on the development of a large user base, on the engagement of users and on users' contribution of content. It is also dependent on the collection of user data from intensive monitoring of that engagement and contribution, which can be sold to third parties or used to generate increased revenues through more precisely targeted adverts.

Equally, take an online marketplace that generates revenue through matching suppliers and purchasers of a good in return for a commission, or a collaborative platform that charges a commission for bringing together supply and demand for assets and possessions owned by individuals. The success of those businesses is reliant on the active involvement of users on either side of the intermediated market and the expansion of that user base to

allow the business to benefit from network effects, economies of scale and market power. The desire to maintain an engaged customer base and use information from that customer base to improve products and offerings is not new. However, the success of the businesses outlined above is much more reliant on the activities, decisions, and participation of users with whom the business forms a more sophisticated and sustained relationship.

3.2.4. Users generated value

The participation of users, which is not under the control of the business, contributes to the creation of the brand. It also contributes to the generation of valuable data, and to the development of a critical mass of users, which helps to establish market power and allows businesses to take advantage of the low marginal costs that are typically associated with running such a platform across multiple markets [1], [2], [7], [10], [16]. It also explains why some of these businesses choose to or are able to provide innovative services to users for no charge. This user-generated value is not captured under the existing international nor domestic tax frameworks, which focuses exclusively on the physical activities of a business itself in determining where profits should be allocated for corporate tax purposes. This means that online businesses can generate significant value from a market like Kenya without the profits they derive from that value being subject to the Kenyan corporation tax.

Furthermore, companies in the gig economy (Uber, Lyft, Airbnb) operate within a hugely intricate system. These companies typically bring together three parties: the gig worker, the digital platform, and the customer. These companies then position themselves as intermediaries connecting the workers with the users through a digital platform. Often this means positioning themselves as technology companies, with critical implications for their tax status [5]. Uber is an example. Uber in Kenya is served by around 12,000 drivers [57]. Rather than describing itself as a transportation company that employs drivers and pays taxes like traditional companies, Uber describes itself as a digital intermediary that provides a 'matchmaking' service of drivers and users through its digital platform from the Netherlands. These two features, being a digital company and being based in the Netherlands, allow Uber to make considerable tax savings [3]. The Uber example shows that the digital economy is relatively undertaxed when compared with traditional businesses [56], [59], [66] which in many countries have varied taxes.

3.2.5. Permanent establishment versus the multinational digital presence/electronic presence

A major challenge concerning the taxation of the digital economy has to do with the mobile and intangible nature of digital goods and services. Over the last century, the traditional economy and the existing tax policies attached to it have been rooted in clear-cut jurisdictional brick-and-mortar physical locations where goods and services are produced could signify physical presence (also known as a permanent establishment), and they could be used to determine where tax must be paid. In the digital economy, the same thought process cannot be applied. Almost all commerce along the supply chain is done virtually without a significant physical presence in one or any jurisdiction, although a company may still have physical stores, factories, or warehouses. The very nature of the digital economy means that a fixed place of residence within a national boundary is no longer required to generate income, especially for new business models based on subscription, access or advertisement, and new technologies such as 3D printing. Earlier while global tax policy was lagging in reconstructing the definition of permanent establishments [21], European and certain African governments (Kenya for example) are updating their definition of permanent establishment to accurately reflect digital presence. The problem, nevertheless, remains on consensus around the criteria to be met in a taxable year for the digital enterprise. Logically, it can be presumed that each country will define its own set of criteria to tap a proportionate share of profits.

3.2.6. Anonymous digital operators

The difficulty in capturing value creation and data will challenge the capacity of tax administrations to collect VAT on cross border trade in services and intangibles. This issue stems from challenges to do with anonymity and difficulty of identifying companies in the digital economy, the absence of a paper trail, determining the amount of tax, and the increased ability to conceal incomes and assets offshore using tax havens [19]. The report released by the OECD on the *Model Rules for Reporting by Platform Operators with respect to Sellers in the Sharing and Gig Economy* (MRDP) offers strategic measures that enable tax administrators to collect information on the income realised by entities offering digital services [38].

3.2.7. Tax treatment of consumers of service provider platforms

Another issue relates to domestic enforcement. Questions are raised about the nature of tax implications, for example whether workers of an online taxi (such as An Nisa, Kenyan Women only taxi platform), car transportation, or food delivery mobile app, in which drivers use their own cars, are considered employees or self-employed independent contractors? How African tax officials will, for example, treat these workers is unclear [4]. Other relevant issues include the digital economy's reliance on data, network effects, the spread of multisided business models, a tendency toward monopoly or oligopoly, and volatility [39]. There are also logistical challenges as the digital economy has increased cross-border movements of people, goods, and services as well as the number of economic agents operating in the system. Such an increase in numbers presents a greater workload for tax administrators and raises questions about their ability to administer tax law effectively.

The rise of the digital economy is creating many challenges for policy makers, and they must be attentive to these changes and understand what they are regulating. A focus on adapting and reinventing policies to stay ahead of the game is necessary to ensure they are regulating the digital economy that exists today.

3. AFRICA'S GAIN/LOSS ON THE DIGITAL TAX – THE EVOLVING THUNDER

Schumpeter once wrote that *"the spirit of a people, its social structure, the deeds its policy may prepare, all this and more is written in its fiscal history, stripped of all phrases. He who knows how to listen to its message here discerns the thunder of world history"* [54]. More of this thunder is needed in understanding on what to do with imposing the digital tax after addressing the challenges already set out. International tax rules are needed to explicitly prevent double taxation. This creates a paradigm shift in recasting domestic tax laws as part of the internationally agreed tax rules. Relatedly, it also creates an idea around international taxation as a monist system.

Legal monism is the view that there is only one legal system. The OECD defends a strong version of legal monism related to cross border taxation of multinationals. Broadly, the argument then is that a unilateral approach to taxing the digital economy protects against its double taxation. This normative cognition assumes that no two states can have conflicting cross border tax policies for digital corporations. Taxing digital businesses, therefore, belongs to the tax system negotiated at the international level. Taxation rights are protected through double tax avoidance treaties, but these treaties as currently formulated under the OECD Model Convention on Income and on Capital did not contemplate taxation rights resulting out of the digitalisation of business models. At the time of the Model's drafting, the concept of digital business models capable of earning taxable profits was not naturally pertinent.

Hence, the first major attempt to renovate and align such a tax model with today's digital economy was started by the OECD at the request of the Group of Twenty (G20). The OECD published a plan, called the Action Plan on Base Erosion and Profit Shifting (BEPS). The overarching objective of BEPS is to level the playing field for the future economy by ensuring that all businesses are taxed equally and gaps in international tax rules that allow

multinational enterprises to legally but artificially shift profits to low or no-tax jurisdictions are eliminated [42]. While the OECD provides the platform for collaboration on the digital tax, it is also the forum for friction and conflict on the development of tax rules around the norms that establish the legal right to impose the digital tax. Thus far, three features are proposed: user participation, value creation and data. What do these features mean for Africa?

User participation contributes to value creation because users' data will later be used and monetised for targeted advertising [29]. The profits will not be necessarily taxed in the country of the user (and viewer of the advert), but rather in the country where the advertising algorithms, for example, has been developed. This means that the user contribution to the profits is not going to be considered when the company is taxed. This is because of the difficulty of tracing income attribution to active user participation in a particular country. As of January 2020, there were about 22.86 million internet users in Kenya and about 8.80 million social media users [8]. How will the tax collectors in Kenya trace the attribution of income of a digital enterprise to active user participation from Kenya, especially given the lack of physical presence in the country?

Grinberg draws attention to the problem of thinking around taxing digital business models based on user participation. He argues that the success in imposing the digital tax will be dependent on the collection of user data from intensive monitoring of their engagement and contribution [16]. This would require a collaborative platform from which citizens would permit tax collectors to collect their digital footprint. The drawback here is that African tax systems are not fully digitalized to enable the development of such a collaborative platform. Further, legal barriers exist that prevent tax authorities from collecting user's digital data. How can the difficulties in establishing African user participation be overcome? Is the proposed fractional apportionment method a solution?

The proposed fractional apportionment methods under BEPS Pillar 1 are based on the view that jurisdictions in which users are located should be entitled to tax a portion of those business profits. This is an equitable proposition. It recognises African governments right to tax, but is pegged on a combination of algorithms, user data, sales functions, and knowledge. Will African governments have access to this information? Are there provisions for its automatic exchange between jurisdictions in which a digital company operates? Will there be an online register filtering user participation from different countries to enable domestic tax collectors determine the proportion of revenue earned by the digital business that is owed to them? The answers to this will determine Africa's gain or loss from the imposition of the digital tax.

While these challenges are going to be addressed at the OECD level, Hearson points out that African governments have taken the initiative to impose local digital taxes in the form of charging an excise duty on digital transactions, collecting VAT from foreign digital service providers and introducing equalization levies that target the profits made by foreign digital businesses [22]. Papis-Almansa has demonstrated the difficulties in collecting these forms of taxes since they are dependent on international and intergovernmental cooperation [45]. It seems that Africa is not in a position to properly leverage on the collection of the digital tax except by increasing the tax burden on the consumer.

Petruzzi and Koukouliti [46] and Sheppard [55] explain that imposing an equalization tax on turnover of digitalized companies, a withholding tax on digital transactions, a levy on revenues generated from providing digital services or advertising activities, must be based on the concept of a significant digital presence. This concept currently raises difficult legal questions regarding the concept's compatibility with tax treaties, fundamental freedoms, free trade agreements and the World Trade Organisation (WTO) rules. An option for African countries, therefore, is to implement unilateral domestic tax measures around VAT. It is an approach supported by the OECD International VAT/GST Guidelines [41]. OECD guidelines are based on the destination principle that VAT on digital

transactions should be levied in the jurisdiction in which final consumption occurs. Ndajiwo asserts that this principle allows African countries to benefit from imposing domestic VAT on digital business to consumer transactions [37].

The failure to reach agreement on a coordinated approach at the OECD level on imposing the digital tax has increased the risk of unilateral action by African countries [29]. Kenya for example will impose the digital services tax on all online transactions, unless they are legally exempted, from January 2021 [15]. ATAF has attempted to develop rules to support African governments on taxing the digital economy [3]. In its *Suggested Approach to Drafting Digital Services Tax Legislation* (DST) it proposes a rate between 1% and 3% on gross annual digital services revenue earned by a company of multinational enterprise *in* a country (not *from* a country – which would imply the lack of a permanent establishment) [3]. The activities within the scope of the proposed DST are digital services derived, directly or indirectly, by a company or a multinational group in a given country (that is where there is a permanent establishment or some form of registered office or a subsidiary operating), such as online advertising services; data services; online marketplace or intermediation platform services; facilitation of rental or use of real property located in a country; vehicle hire services; digital content services, online gaming services and cloud computing; and any other digital services [3].

The ATAF proposed DST also suggests formulas for allocating income from the services mentioned above to a particular country. Broadly, DST will be levied on the portion of revenue that relates to the participation of users in a given country, and it will apply to the gross revenues. This takes us back to the problem Grinberg identified - the problem of thinking around taxing digital business models based on user participation without establishing how this participation will be measured and identified by tax collectors [16]. The ATAF proposed DST provides some guidance. It looks to the number of users as the basis upon which a company or multinational's global revenues arising from digital services will be apportioned to a given country. It does not, however, explain how this user data will be acquired or captured by domestic tax collectors.

Reflecting on the foregoing many developing African countries are inadequately prepared to tax the digital economy for various reasons. One, their digital infrastructure is not able to keep pace with the fast-growing demand for digital services and there is a severe lack of infrastructure for digital access and connectivity. Two, lack of cost-effective, available and reliable electricity is a major obstacle to digital economy development [70]. Malawi, is an example where power shortage is rampant. Without electricity, there can be no digital economy and this could for example exacerbate losing out on capturing digital data. Three, inadequate capacity within the revenue authority department responsible for monitoring digital transactions. Four, lack of domestic data on online businesses.

Since data has become the primary resource of an increasingly digitalized economy developing African countries need to secure a degree of national sovereignty with respect to issues of data ownership, privacy, cybersecurity, structural transformation and economic inclusion objectives. These remain rudimentary in developing African countries. The national taxation systems have not yet adapted to the rise of e-commerce and digital platforms. Issues of market dominance, competition and market access continue to pose challenges. Developing African countries are still in the formative stages of developing digital industrial capabilities including ensuring high speed and cheap broadband, building linkages between digital platforms and domestically produced goods and services, the provision of industrial financing instruments to do so and the adaptation of technology and skills curricula and institutions to new digital realities.

This paper has shown that the borderless nature of digital economy produces specific challenges around identification of businesses, determination of the extent of activities, information collection and verification, and identification of customers (user participation). The continual increase in the potential of digital economy and the

reduced need for extensive physical presence to carry on business, alongside the role of users has raised questions as to whether the current rules to determine a nexus with a jurisdiction for tax purposes are appropriate. Companies in the digital economy gather and use information across borders and this raises the issue of how to attribute value created from the generation of data through digital products and services and how to characterise for tax purposes a person or entity's supply of data in a transaction. Finally, the development of new digital products and means of delivering services creates uncertainties in relation to the proper characterisation of payments made in the context of new business models and how to apply tax to these payment methods. Consequently, in attempting to tax the digital economy, a number of policy measures are next provided.

4. CONCLUSION AND POLICY RECOMMENDATIONS

This paper has addressed the challenges of taxing the digital economy. It promotes digital taxation to reign in the digital economy as part of a state's taxable base and economic structure. It supports the redefinition of the tax rules governing traditional businesses to include the taxable features of the digital economy. The paper advocates for unilateral tax measures to enable developing African states capture the digitally enabled movement of money. The problems around determining value creation, user participation and data identified as challenges to imposing the digital tax can be overcome by rethinking the digital tax approach. The following recommendations are thus made.

First, African countries should consider introducing a one-off digital presence tax. This tax should be subjected to bilateral and multilateral agreements between the state in which the foreign company has a digital presence and the state in which the foreign company is incorporated and is a taxpayer. This paper proposes a one-off digital presence tax of 0.5% based on the value of the company's goodwill. Second, the African Union should push for a global or continental consensus towards a legal requirement for all companies with a digital presence to provide an online database showing the source of its revenue generation. Third, domestic African states should authorise financial institutions to automatically deduct value added tax (VAT)/sales tax for goods and services purchased and paid for online and through applications. Fourth, African states should, at the African Union level as well as within their regional blocs, recognise digital presence of companies as permanent establishment for tax purposes. Fifth, domestic states should enact regulations requiring web hosting companies to declare digital presence of foreign companies on their online platforms. Finally, France has framed a unilateral digital tax around three revenue streams: advertising revenue; commission income generated by online marketplaces when facilitating transactions between users; and income from the resale of user data for advertising purposes. Developing African countries can look to apply the French approach.

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